

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Appl. No. : 10/750,210 Confirmation No. 6655  
Applicant(s) : Kenneth K. Cyr, et al.  
Filed : January 2, 2004  
Group Art Unit : 3625  
Examiner : Amee A. Shah  
Title : SYSTEM AND METHOD FOR MANAGEMENT OF CLINICAL SUPPLY OPERATIONS  
Atty. Docket No. : CRNI.111423  
Customer No. : 46169

**VIA EFS WEB- 9/6/2011**

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Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**APPELLANTS' APPEAL BRIEF**

Dear Sir: This is an appeal from a Final Office Action dated March 2, 2011, rejecting claims 1-7, 9-12, and 15-38. These claims have been at least twice rejected. Appellants, having filed a Notice of Appeal on July 5, 2011, within the time period provided under § 1.134 accompanied by the fee set forth in 37 C.F.R. § 41.20(b) (1), do hereby submit this Appeal Brief along with the fee set for in § 41.20(b)(2). The Commissioner is hereby authorized to charge any additional fee that may be due, or credit any overpayment due to Deposit Account No. 19-2112.

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## **I. REAL PARTY IN INTEREST**

The real party in interest is CERNER INNOVATION, INC., a corporation duly organized and existing under the laws of the State of Delaware, United States of America, and having its principle place of business at 12 Corporate Woods, 10975 Benson, Suite 550, Overland Park, Johnson County, State of Kansas, 66210.

## **II. RELATED APPEALS AND INTERFERENCES**

None.

## **III. STATUS OF CLAIMS**

Claims 1-7, 9-12, and 15-38 are pending and are the subject of this appeal.

## **IV. STATUS OF AMENDMENTS**

The after-final response submitted June 2, 2011, included amendments to claim 1. The Office granted entry of these amendments on June 13, 2011.

## **V. SUMMARY OF CLAIMED SUBJECT MATTER**

The instant Application includes three independent claims: 1, 15, and 27. The present invention is defined by the claims, but summarily, embodiments of the invention are generally directed to automatically fulfilling orders for clinical supplies. *See, e.g., id.*, ¶ [0010]) FIGS. 7 and 10.<sup>1</sup> Clinical orders are generated based on real time consumption data (*e.g.*, items used or consumed) derived from documentation of a clinical event. The orders are subsequently evaluated to determine whether the supplies are time sensitive. The orders for time sensitive supplies are released without accumulation. The orders for items that are not time sensitive are accumulated. *Id.* at [0040]. Other accumulation criteria are described in the claims.

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<sup>1</sup> Please note that all references to the Specification refer to the Specification of the present Application as filed on January 2, 2004.

**A. Independent Claim 1 (first of three independent claims)**

Claim 1 is directed to one or more non-transitory computer-storage media having computer-executable instructions for performing a method of automatically fulfilling orders for clinically related supplies. *See e.g., id.* p. 20, ([¶ 0050]). The method includes automatically generating orders for clinically related supplies based upon real time supply consumption data. *See e.g., id.* p. 5 ([¶ 0010]); p. 15, ([¶ 0038]). The consumption data is derived from documentation of at least one clinical event generated while the clinical event is carried out. *Id.* The supply consumption data includes items used or consumed during the at least one clinical event. *See e.g., id.* p. 19, ([¶ 0047]). The clinical event is carried out at a clinically related site having a plurality of clinical departments. *See e.g., id.* p. 17 ([¶ 0044]); p. 19, ([¶ 0046]). The method includes determining that a first subset of the clinically related supplies specified in the orders are suitable for aggregation because the clinically related supplies are non-time sensitive. *See e.g., id.* p. 16 ([¶ 0040]). The method also includes determining that a second subset of the clinically related supplies specified in the orders are not suitable for aggregation because the clinically related supplies are time sensitive. *Id.* The method also includes, without user intervention, accumulating a plurality of orders for the clinically related supplies in the first subset for delivery from a vendor before triggering delivery of the clinically related supplies in the first subset from the vendor. *Id.* The plurality of orders are received from more than one of the plurality of clinical departments. *See e.g., id.* p. 17 ([¶ 0044]); p. 19, ([¶ 0046]). The method also includes without user intervention, triggering delivery of the clinically related supplies in the second subset without aggregation. *See e.g., id.* p. 11 ([¶ 0031]); p. 19, ([¶ 0046]).

**B. Independent Claim 15 (second of three independent claims)**

Claim 15 is directed to a method for automatically fulfilling orders for clinically related supplies. *See e.g., id.* p. 20, ([¶ 0050]). The method includes tracking a clinical supply

inventory at a clinically related site. *Id.* The method also includes generating a pick ticket including a selection of clinically related supplies for a clinical event. *See e.g., id.* p. 20, ([¶ 0051]). The method further includes retrieving the clinically related supplies from storage and consuming the clinically related supplies during the clinical event. *Id.* The method further includes updating a patient supply record in real time to generate real time supply consumption data indicating the clinically related supplies that were consumed in the clinical event. *See e.g., id.* p. 5 ([¶ 0010]); p. 15, ([¶ 0038]); p. 20, ([¶ 0051]). The method also includes automatically generating at least one order for the clinically related supplies based on the real time supply consumption data derived from documentation of the clinical event generated while the clinical event is carried out. *See e.g., id.* p. 21, ([¶ 0052]). The supply consumption data including items used or consumed during the at least one clinical event at the clinically related site. *See e.g., id.* p. 19, ([¶ 0047]). The method also includes determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]). The method also includes determining that the at least one of the clinically related supplies is non-time sensitive. *See e.g., id.* p. 16 ([¶ 0040]). The method includes, upon said determining that the favorable purchase price may be derived and the at least one of the clinically related supplies is non-time sensitive, without human intervention, accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery. *See e.g., id.* p. 16 ([¶ 0040]). The method also includes triggering delivery of the at least one of the clinically related supplies after accumulating multiple orders for the at least one of the clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]); p. 21, ([¶ 0053]).

### **C. Independent Claim 27 (third of three independent claims)**

Claim 27 recites a method for generating a set of clinically related supplies generated for delivery. *See e.g., id.* p. 20, ([¶ 0050]). The method includes automatically generating, at a computing device, at least one order for clinically related supplies based upon real time supply consumption data. *See e.g., id.* p. 5 ([¶ 0010]); p. 15, ([¶ 0038]). The consumption data is derived from documentation of at least one clinical event generated while the clinical event is carried out. *Id.* The supply consumption data includes items used and/or consumed during the at least one clinical event at a clinically related site. *Id.* The method also includes determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]). The method further includes, upon said determining, without human intervention, accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery. *See e.g., id.* p. 16 ([¶ 0040]). The method also includes triggering delivery of the at least one of the clinically related supplies based at least upon the at least one order for clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]); p. 21, ([¶ 0053]).

## **VI. GROUNDS OF REJECTIONS TO BE REVIEWED ON APPEAL**

The following recites each ground of rejection presented herein for review by the Board:

1. Whether claims 1-7, 9-12, and 15-38 are unpatentable over U.S. Patent Number 5,682,728 to DeBusk in view of U.S. Publication Number 2001/0016821 to DeBusk under 35 U.S.C. § 103(a).

## VII. ARGUMENT

**A. The rejection of claims 1-7, 9-12, and 15-38 under 35 U.S.C. 103(a) as ostensibly being unpatentable over U.S. Patent Number 5,682,728 to DeBusk in view of U.S. Publication Number 2001/0016821 to DeBusk should be reversed because the references fail to teach all features of the claims.**

### **1. Claims 1-7 and 10-14**

The Office combined the DeBusk '728 reference with DeBusk '821 reference to reject claim 1 as obvious. The Office asserts that these references are a "combination of known techniques to yield a predictable result." Final Office Action of 3/2/11. In actuality, at least two techniques of claim 1 are not described in either of the cited references. Neither the "accumulation" of orders nor the "generation" of orders based on "real time" consumption data are described within the references cited by the Office. And because techniques in claim 1 are absent from the cited references, the cited references do not combine to render claim 1 obvious.

Initially an overview of claim 1 is provided with the techniques missing from the cited references in bold. As noted above, claim 1 is directed to one or more non-transitory computer-storage media having computer-executable instructions for performing a method of automatically fulfilling orders for clinically related supplies. *See e.g., id.* p. 20, ([¶ 0050]). The method includes automatically **generating orders** for clinically related supplies **based upon real time supply consumption data**. *See e.g., id.* p. 5 ([¶ 0010]); p. 15, ([¶ 0038]). The consumption data is derived from documentation of at least one clinical event generated while the clinical event is carried out. *Id.* The supply consumption data includes items used or consumed during the at least one clinical event. *See e.g., id.* p. 19, ([¶ 0047]). The clinical event is carried out at a clinically related site having a plurality of clinical departments. *See e.g., id.* p. 17 ([¶ 0044]); p. 19, ([¶ 0046]). The method includes **determining that a first subset of the clinically related supplies specified in the orders are suitable for aggregation because the**

**clinically related supplies are non-time sensitive.** *See e.g., id.* p. 16 ([¶ 0040]). The method also includes determining that a second subset of the clinically related supplies specified in the orders are not suitable for aggregation because the clinically related supplies are time sensitive. *Id.* The method also includes, without user intervention, **accumulating a plurality of orders for** the clinically related supplies in the first subset for delivery from a vendor before triggering delivery of the clinically related supplies in the first subset from the vendor. *Id.* The plurality of orders are received from more than one of the plurality of clinical departments. *See e.g., id.* p. 17 ([¶ 0044]); p. 19, ([¶ 0046]). The method also includes without user intervention, triggering delivery of the clinically related supplies in the second subset without aggregation. *See e.g., id.* p. 11 ([¶ 0031]); p. 19, ([¶ 0046]).

In contrast, the DeBusk '728 reference, describes the management of consumable medical supplies by creating bills of material associated with care events within a clinical pathway. *See DeBusk '728 reference at col. 2, l. 29-37.* A bill of materials representing those medical supplies "to be used" for a scheduled care event is generated and those supplies are placed into supply bundles at a number of locations and then delivered in bundled form to the end-user. *See id.* at col. 2, l. 50 to col. 3, l. 2; and col. 3, l. 34. The DeBusk '728 reference also discloses anticipating supply usage based upon historical records relating to the frequency of occurrence of given care events at a particular facility and total usage of common medical supplies over time. *See id.* at col. 2, l. 59 to col. 6, l.13. The DeBusk '821 reference describes improvements to the system described in the DeBusk '728 reference. For example, the DeBusk '821 reference provides additional analytics for historical usage patterns. *See DeBusk '821 reference Fig. 1.*

As mentioned, neither the “accumulation” of orders nor the “generation” of orders based on “real time” supply data are obvious in review of the DeBusk ‘728 reference and the DeBusk ‘821 reference.

The method in claim 1 accumulates “a plurality of orders for the clinically related supplies … before triggering delivery of the clinically related supplies.” The combination of references does not accumulate orders for supplies, but instead bundles supplies based on procedure. *See* DeBusk ‘728 col. 3, ll. 38-43 (stating, “This aspect of the method permits the institution to order disposable medical supplies by procedure, as opposed to the traditional ordering of individual items of medical supplies for warehousing at the institution and withdrawing from the stock of these supplies as needed.”); DeBusk ‘821 (stating “When a procedure is scheduled at a customer's healthcare facility, an order for the corresponding unitized container is transmitted electronically . . . .”) The primary purpose of both DeBusk references is to build customized procedure packs, which is a bundle of clinical supplies. Combining multiple items in a single bundle is not the same thing as accumulating orders. Accordingly, the combination of references does not describe the technique of accumulating orders.

A second issue is the cited references failure to describe the criteria used to determine which orders should be accumulated. In claim 1, orders in a first subset are determined to be “suitable for aggregation because the clinically related supplies are non-time sensitive.” A second subset of orders is determined to be time sensitive and are not accumulated. Thus, the criteria for accumulation of orders is whether the orders are time sensitive. In contrast, the DeBusk ‘728 reference combines clinical supplies according to a procedure. Clinical supplies needed to perform a procedure are bundled together. *See* DeBusk ‘728 reference col. 3, ll. 40-45. The DeBusk ‘821 reference also bundles clinical supplies together based on procedure.

*See* DeBusk '821 reference abstract. The DeBusk references both describe managing inventory based on a historical usage analysis. *See* DeBusk '728 reference col. 6, ll. 7-8; DeBusk '821 [0099]. Thus, the DeBusk '728 reference combines items based on procedure into a bundle and orders bundles based on historical usage, not time sensitiveness.

Before the orders can be accumulated they must first be generated. The orders in claim 1 are automatically generated based upon "real time supply consumption data derived from documentation of at least one clinical event generated while the clinical event is carried out." Real time supply consumption data is the key information used to generate the order. The DeBusk '821 reference describes real time supply consumption data. *See* DeBusk '821 reference [0120]. But the real time supply data is not used to generate an order. Rather, an order for supplies is generated when a patient schedules a procedure. *See* DeBusk reference '821 [0090]. The real time supply data is used to anticipate the number clinical supplies needed over a period of time, not generate orders directly. *See* DeBusk reference '821 abstract. At issue is how the DeBusk references uses the real-time supply data. Merely recording real time supply data without using it to automatically generate orders does not teach the order generation technique of claim 1.

The Office concedes that the DeBusk '728 reference does not describe the generation of orders using real time consumption data. The DeBusk '728 reference describes the management and procurement of supply bundles containing medical supplies "intended for use" in a future care event. *See* DeBusk '728 reference at col. 5, l. 22-45. The number of bundles ordered during the year may be based on historical usage data that shows how many bundles are typically used during a period of time. *See id.* at col. 2, l. 59 to col. 6, l.13. In contrast, claim 1 describes automatically generating orders to replenish used supplies (i.e., items used and/or

consumed during a clinical event) by basing the order on real time supply consumption data.

Basing orders on historical usage data, as described in the DeBusk '728 reference, is not the same as automatically generating orders based on real time consumption data. Thus, the DeBusk '728 reference does not describe "automatically generating at least one order based on real time supply consumption data."

Thus, Applicants respectfully suggest that the Office has not carried its burden of establishing a *prima facie* case of obviousness because the combinations of references do not describe all elements of independent claims 1. Further, each of claims 2-7 and 10-14 depends, either directly or indirectly, from independent claim 1 and defines further patentable features. Accordingly, the arguments set forth above with respect to independent claim 1 are equally applicable to these dependent claims. For at least the reasons stated above, Appellants respectfully request that the Examiner's rejection of claims 1-7 and 10-14 be reversed and the claims allowed.

## **2. Claim 9**

Claim 9 depends from claim 1 and is patentable over the DeBusk references for at least for the reasons provided above for claim 1. Additionally, claim 9 recites additional features not taught or suggested by the DeBusk references. Claim 9 recites "wherein the clinically related supplies in the first subset are determined to be suitable for aggregation because the clinically related supplies in the first subset are also categorized as non critical." As mentioned, the cited references generate orders for medical bundles based on historical usage data. The cited references to not evaluate whether the clinical supplies are critical. *See* DeBusk '728. at col. 2, l. 59 to col. 6, l.13; DeBusk '821 [0099].

## **3. Claims 15-26**

Initially an overview of claim 15 is provided with the techniques missing from the cited references in bold. As noted above, claim 15 is directed to a method for automatically fulfilling orders for clinically related supplies. *See e.g., id.* p. 20, ([¶ 0050]). The method includes tracking a clinical supply inventory at a clinically related site. *Id.* The method also includes generating a pick ticket including a selection of clinically related supplies for a clinical event. *See e.g., id.* p. 20, ([¶ 0051]). The method further includes retrieving the clinically related supplies from storage and consuming the clinically related supplies during the clinical event. *Id.* The method further includes updating a patient supply record in real time to generate real time supply consumption data indicating the clinically related supplies that were consumed in the clinical event. *See e.g., id.* p. 5 ([¶ 0010]); p. 15, ([¶ 0038]); p. 20, ([¶ 0051]). The method also includes automatically **generating at least one order for the clinically related supplies based on the real time supply consumption** data derived from documentation of the clinical event generated while the clinical event is carried out. *See e.g., id.* p. 21, ([¶ 0052]). The supply consumption data including items used or consumed during the at least one clinical event at the clinically related site. *See e.g., id.* p. 19, ([¶ 0047]). The method also includes **determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies.** *See e.g., id.* p. 16 ([¶ 0040]). The method also includes **determining that the at least one of the clinically related supplies is non-time sensitive.** *See e.g., id.* p. 16 ([¶ 0040]). The method includes, upon said determining that the **favorable purchase price** may be derived **and** the at least one of the clinically related supplies **is non-time sensitive**, without human intervention, **accumulating** additional orders for the at least one of the clinically related supplies prior to triggering delivery. *See e.g., id.* p. 16 ([¶ 0040]). The method also includes triggering

delivery of the at least one of the clinically related supplies after accumulating multiple orders for the at least one of the clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]); p. 21, ([¶ 0053]).

The rejection of claim 15 suffers from many of the same deficiencies as the rejection of claim 1. Specifically, neither the “accumulation” of orders nor the “generation” of orders based on “real time” supply data are obvious in review of the DeBusk ‘728 reference and the DeBusk ‘821 reference. One difference is that claim 15 accumulates orders to obtain a favorable purchase price and accumulates the orders that are not time-sensitivity. Regardless, the cited references do not accumulate orders for any reason.

The method in claim 15 recites “upon said determining that the favorable purchase price may be derived and the at least one of the clinically related supplies is non-time sensitive, without human intervention, accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery.” The combination of references does not accumulate orders for supplies, but instead bundles supplies based on procedure. *See* DeBusk ‘728 col. 3, ll. 38-43 (stating, “This aspect of the method permits the institution to order disposable medical supplies by procedure, as opposed to the traditional ordering of individual items of medical supplies for warehousing at the institution and withdrawing from the stock of these supplies as needed.”); DeBusk ‘821 (stating “When a procedure is scheduled at a customer's healthcare facility, an order for the corresponding unitized container is transmitted electronically . . . .”) The primary purpose of both DeBusk references is to build customized procedure packs, which is a bundle of clinical supplies. Combining multiple items in a single bundle is not the same thing as accumulating orders. Accordingly, the combination of references does not describe the technique of accumulating orders.

A second issue is the cited references failure to describe the criteria used to determine which orders should be accumulated. In claim 15, orders are determined to be suitable for accumulation because they are not time sensitive and a favorable purchase price may be obtained by accumulating orders. In contrast, the DeBusk '728 reference combines clinical supplies according to a procedure. Clinical supplies needed to perform a procedure are bundled together. *See* DeBusk '728 reference col. 3, ll. 40-45. The DeBusk '821 reference also bundles clinical supplies together based on procedure. *See* DeBusk '821 reference abstract. The DeBusk references both describe managing inventory based on a historical usage analysis. *See* DeBusk '728 reference col. 6, ll. 7-8; DeBusk '821 [0099]. Thus, the DeBusk '728 reference combines items based on procedure into a bundle and orders bundles based on historical usage, not time sensitiveness and determining that favorable purchase price may be derived.

Before the orders can be accumulated they must first be generated. The orders in claim 15 are generated based upon "real time supply consumption data derived from documentation of the clinical event generated while the clinical event is carried out." Real time supply consumption data is the key information used to generate the order. The DeBusk '821 reference describes real time supply consumption data. *See* DeBusk '821 reference [0120]. But, the real time supply data is not used to generate an order. Rather, an order for supplies is generated when a patient schedules a procedure. *See* DeBusk reference '821 [0090]. The real time supply data is used to anticipate the number clinical supplies needed over a period of time, not generate orders directly. *See* DeBusk reference '821 abstract. At issue is how the DeBusk references uses the real-time supply data. Merely recording real time supply data without using it to automatically generate orders does not teach the order generation technique of claim 15.

The Office concedes that the DeBusk '728 reference does not describe the generation of orders using real time consumption data. The DeBusk '728 reference describes the management and procurement of supply bundles containing medical supplies "intended for use" in a future care event. *See* DeBusk '728 reference at col. 5, l. 22-45. The number of bundles ordered during the year may be based on historical usage data that shows how many bundles are typically used during a period of time. *See id.* at col. 2, l. 59 to col. 6, l.13. In contrast, claim 15 describes automatically generating orders to replenish used supplies (i.e., items used and/or consumed during a clinical event) by basing the order on real time supply consumption data. Basing orders on historical usage data, as described in the DeBusk '728 reference, is not the same as automatically generating orders based on real time consumption data. Thus, the DeBusk '728 reference does not describe "automatically generating at least one order based on real time supply consumption data."

Thus, Applicants respectfully suggest that the Office has not carried its burden of establishing a *prima facie* case of obviousness because the combinations of references do not describe all elements of independent claims 15. Further, each of claims 16-26 depends, either directly or indirectly, from independent claim 15 and defines further patentable features. Accordingly, the arguments set forth above with respect to independent claim 15 are equally applicable to these dependent claims. For at least the reasons stated above, Appellants respectfully request that the Examiner's rejection of claims 15-26 be reversed and the claims allowed.

#### **4. Claims 27-35**

As noted, claim 27 recites a method for generating a set of clinically related supplies generated for delivery. *See e.g., id.* p. 20, ([¶ 0050]). The method includes

automatically generating, at a computing device, at least one order for clinically related supplies based upon real time supply consumption data. *See e.g., id.* p. 5 ([¶ 0010]); p. 15, ([¶ 0038]). The consumption data is derived from documentation of at least one clinical event generated while the clinical event is carried out. *Id.* The supply consumption data includes items used and/or consumed during the at least one clinical event at a clinically related site. *Id.* The method also includes determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]). The method further includes, upon said determining, without human intervention, accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery. *See e.g., id.* p. 16 ([¶ 0040]). The method also includes triggering delivery of the at least one of the clinically related supplies based at least upon the at least one order for clinically related supplies. *See e.g., id.* p. 16 ([¶ 0040]); p. 21, ([¶ 0053]).

The rejection of claim 27 suffers from many of the same deficiencies as the rejection of claim 1. Specifically, neither the “accumulation” of orders nor the “generation” of orders based on “real time” supply data are obvious in review of the DeBusk ‘728 reference and the DeBusk ‘821 reference. One difference is that claim 27 accumulates orders to obtain a favorable purchase price.

The method in claim 15 recites “determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies” and upon said determining “accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery.” The combination of references does not accumulate orders for supplies, but instead bundles supplies

based on procedure. *See* DeBusk '728 col. 3, ll. 38-43 (stating, "This aspect of the method permits the institution to order disposable medical supplies by procedure, as opposed to the traditional ordering of individual items of medical supplies for warehousing at the institution and withdrawing from the stock of these supplies as needed."); DeBusk '821 (stating "When a procedure is scheduled at a customer's healthcare facility, an order for the corresponding unitized container is transmitted electronically . . . .") The primary purpose of both DeBusk references is to build customized procedure packs, which is a bundle of clinical supplies. Combining multiple items in a single bundle is not the same thing as accumulating orders. Accordingly, the combination of references does not describe the technique of accumulating orders.

A second issue is the cited references failure to describe the criteria used to determine which orders should be accumulated. In claim 27, orders are determined to be suitable for accumulation because a favorable purchase price may be obtained by accumulating orders. In contrast, the DeBusk '728 reference combines clinical supplies according to a procedure. Clinical supplies needed to perform a procedure are bundled together. *See* DeBusk '728 reference col. 3, ll. 40-45. The DeBusk '821 reference also bundles clinical supplies together based on procedure. *See* DeBusk '821 reference abstract. The DeBusk references both describe managing inventory based on a historical usage analysis. *See* DeBusk '728 reference col. 6, ll. 7-8; DeBusk '821 [0099]. Thus, the DeBusk '728 reference combines items based on procedure into a bundle and orders bundles based on historical usage, not because a favorable purchase price may be obtained.

Before the orders can be accumulated they must first be generated. The orders in claim 27 are generated based upon "based upon real time supply consumption data." Real time supply consumption data is the key information used to generate the order. The DeBusk '821

reference describes real time supply consumption data. *See* DeBusk '821 reference [0120]. But, the real time supply data is not used to generate an order. Rather, an order for supplies is generated when a patient schedules a procedure. *See* DeBusk reference '821 [0090]. The real time supply data is used to anticipate the number clinical supplies needed over a period of time, not generate orders directly. *See* DeBusk reference '821 abstract. At issue is how the DeBusk references uses the real-time supply data. Merely recording real time supply data without using it to automatically generate orders does not teach the order generation technique of claim 27.

The Office concedes that the DeBusk '728 reference does not describe the generation of orders using real time consumption data. The DeBusk '728 reference describes the management and procurement of supply bundles containing medical supplies "intended for use" in a future care event. *See* DeBusk '728 reference at col. 5, l. 22-45. The number of bundles ordered during the year may be based on historical usage data that shows how many bundles are typically used during a period of time. *See id.* at col. 2, l. 59 to col. 6, l.13. In contrast, claim 27 describes automatically generating orders to replenish used supplies (i.e., items used and/or consumed during a clinical event) by basing the order on real time supply consumption data. Basing orders on historical usage data, as described in the DeBusk '728 reference, is not the same as automatically generating orders based on real time consumption data. Thus, the DeBusk '728 reference does not describe, "automatically generating at least one order based on real time supply consumption data."

Thus, Applicants respectfully suggest that the Office has not carried its burden of establishing a *prima facie* case of obviousness because the combinations of references do not describe all elements of independent claims 27. Further, each of claims 28-38 depends, either directly or indirectly, from independent claim 27 and defines further patentable features.

Accordingly, the arguments set forth above with respect to independent claim 27 are equally applicable to these dependent claims. For at least the reasons stated above, Appellants respectfully request that the Examiner's rejection of claims 28-38 be reversed and the claims allowed.

## **B. CONCLUSION**

For at least the reasons given above and because the cited references fail to render obvious claims 1-7, 9-12, and 15-38 for at least the reasons cited hereinabove, Appellants respectfully request that the rejection of the claims be reversed and the claims allowed.

Respectfully submitted,

/JASON O. HOWARD/

Jason O. Howard  
Reg. No. 62,120

JOH/tq

SHOOK, HARDY, & BACON L.L.P.  
2555 Grand Blvd.  
Kansas City, MO 64108-2613  
Tel.: 816/559-2237  
Fax: 816/421-5547

Attorney Docket No. CRNI.111423

Appendices follow.

### VIII. CLAIMS APPENDIX

1. (Previously Presented) One or more non-transitory computer-storage media having computer-executable instructions embodied thereon for performing a method of automatically fulfilling orders for clinically related supplies, the method comprising:

automatically generating orders for clinically related supplies based upon real time supply consumption data derived from documentation of at least one clinical event generated while the clinical event is carried out, the supply consumption data including items used or consumed during the at least one clinical event, wherein the clinical event is carried out at a clinically related site having a plurality of clinical departments; and

determining that a first subset of the clinically related supplies specified in the orders are suitable for aggregation because the clinically related supplies are non-time sensitive;

determining that a second subset of the clinically related supplies specified in the orders are not suitable for aggregation because the clinically related supplies are time sensitive;

without user intervention, accumulating a plurality of orders for the clinically related supplies in the first subset for delivery from a vendor before triggering delivery of the clinically related supplies in the first subset from the vendor, wherein the plurality of orders are received from more than one of the plurality of clinical departments; and

without user intervention, triggering delivery of the clinically related supplies in the second subset without aggregation.

2. (Previously Presented) The media according to claim 1, wherein the clinically related site comprises at least one of a hospital facility, a research facility and a government facility.

3. (Previously Presented) The media according to claim 1, wherein the supply consumption data further includes at least one of clinically available quantities of surgical devices, clinically available quantities of pharmaceuticals and clinically available quantities of consumable material.

4. (Previously Presented) The media according to claim 1, wherein the method further comprises generating the at least one clinical supply order based upon at least one clinical quantity threshold.

5. (Previously Presented) The media according to claim 1, wherein the at least one order for clinically related supplies comprises a purchase order.

6. (Previously Presented) The media according to claim 1, wherein the supply consumption data further includes supply codes captured in the clinically related site.

7. (Previously Presented) The media according to claim 6, wherein the supply codes comprise at least one of optically scanned bar codes, radio frequency identification codes and manually entered codes.

8. (Canceled)

9. (Previously Presented) The media according to claim 1, wherein the clinically related supplies in the first subset are determined to be suitable for aggregation because the clinically related supplies in the first subset are also categorized as non critical.

10. (Previously Presented) The media according to claim 1, wherein the at least one order for clinically related supplies is associated with an individual patient supply record.

11. (Previously Presented) The media according to claim 1, wherein the clinically related supplies in the first subset are determined to be suitable for aggregation because the clinically related supplies in the first subset are also categorized as receiving a favorable purchase price when ordered in a batch.

12. (Previously Presented) The media according to claim 1, wherein the method further comprises triggering delivery of the at least one order for clinically related supplies based upon the at least one order for clinically related supplies and upon a set of rules, and wherein the set of rules comprises a set of selectors based at least upon patient condition information, patient demographic information and supply location information.

13. (Canceled)

14. (Canceled)

15. (Previously Presented) A method for automatically fulfilling orders for clinically related supplies, comprising:

tracking, at a computing device, a clinical supply inventory at a clinically related site;

generating a pick ticket including a selection of clinically related supplies for a clinical event;

retrieving the clinically related supplies from storage;

consuming the clinically related supplies during the clinical event;

updating a patient supply record in real time to generate real time supply consumption data indicating the clinically related supplies that were consumed in the clinical event;

automatically generating at least one order for the clinically related supplies based on the real time supply consumption data derived from documentation of the clinical event generated while the clinical event is carried out, the supply consumption data including items used or consumed during the at least one clinical event at the clinically related site;

determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies;

determining that the at least one of the clinically related supplies is also non-time sensitive;

upon said determining that the favorable purchase price may be derived and the at least one of the clinically related supplies is non-time sensitive, without human intervention, accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery; and

triggering delivery of the at least one of the clinically related supplies after accumulating multiple orders for the at least one of the clinically related supplies.

16. (Original) A method according to claim 15, wherein the clinically related site comprises at least one of a hospital facility, a research facility and a government facility.

17. (Previously Presented) A method according to claim 15, wherein the supply consumption data further includes at least one of clinically available quantities of surgical devices, clinically available quantities of pharmaceuticals and clinically available quantities of consumable material.

18. (Original) A method according to claim 15, wherein the step of automatically generating at least one order comprises a step of generating the at least one clinical supply order based upon at least one clinical quantity threshold.

19. (Original) A method according to claim 15, wherein the at least one order for clinically related supplies comprises a purchase order.

20. (Previously Presented) A method according to claim 15, wherein the supply consumption data comprises supply codes captured in the at least one clinically related site.

21. (Original) A method according to claim 20, wherein the supply codes comprise at least one of optically scanned bar codes, radio frequency identification codes and manually entered codes.

22. (Previously Presented) A method according to claim 15, wherein the at least one order comprises a plurality of orders, further comprising a step of aggregating the orders for clinically related supplies for delivery from a single vendor.

23. (Previously Presented) A method according to claim 22, wherein the orders for clinically related supplies are accumulated for a plurality of clinical departments within the clinically related site.

24. (Original) A method according to claim 15, further comprising a step of associating the at least one order for clinically related supplies with an individual patient supply record.

25. (Original) A method according to claim 15, wherein the triggering of delivery of the at least one order for clinically related supplies comprises triggering delivery based upon the at least one order for clinically related supplies and upon a set of rules.

26. (Original) A method according to claim 25, wherein the set of rules comprises a set of selectors based at least upon patient condition information, patient demographic information and supply location information.

27. (Previously Presented) A method for generating a set of clinically related supplies generated for delivery, method comprising:

automatically generating, at a computing device, at least one order for clinically related supplies based upon real time supply consumption data derived from documentation of at least one clinical event generated while the clinical event is carried out, the supply consumption data including items used and/or consumed during the at least one clinical event at a clinically related site;

determining that a favorable purchase price for at least one of the clinically related supplies may be derived by aggregating orders for the at least one of the clinically related supplies;

upon said determining, without human intervention, accumulating additional orders for the at least one of the clinically related supplies prior to triggering delivery; and

triggering delivery of the at least one of the clinically related supplies based at least upon the at least one order for clinically related supplies.

28. (Previously Presented) The method according to claim 27, wherein the clinically related site comprises at least one of a hospital facility, a research facility and a government facility.

29. (Previously Presented) The method according to claim 27, wherein the supply consumption data further includes at least one of clinically available quantities of surgical devices, clinically available quantities of pharmaceuticals and clinically available quantities of consumable material.

30. (Previously Presented) The method according to claim 27, wherein the step of automatically generating at least one order comprises a step of generating the at least one clinical supply order based upon at least one clinical quantity threshold.

31. (Previously Presented) The method according to claim 27, wherein the at least one order for clinically related supplies comprises a purchase order.

32. (Previously Presented) The method according to claim 27, wherein the supply consumption data further includes supply codes captured in the at least one clinically related site.

33. (Previously Presented) The method according to claim 32, wherein the supply codes comprise at least one of optically scanned bar codes, radio frequency identification codes and manually entered codes.

34. (Previously Presented) The method according to claim 27, wherein the at least one order comprises a plurality of orders, and the method further comprises a step of aggregating the orders for clinically related supplies for delivery from a single vendor.

35. (Previously Presented) The method according to claim 34, wherein the orders for clinically related supplies are aggregated for a plurality of clinical departments within the clinical site.

36. (Previously Presented) The method according to claim 27, wherein the method further comprises a step of associating the at least one order for clinically related supplies with an individual patient supply record.

37. (Previously Presented) The method according to claim 27, wherein the triggering of delivery of the at least one order for clinically related supplies comprises triggering delivery based upon the at least one order for clinically related supplies and upon a set of rules.

38. (Previously Presented) The method according to claim 37, wherein the set of rules comprises a set of selectors based at least upon patient condition information, patient demographic information and supply location information.

## **IX. EVIDENCE APPENDIX**

None

**X. RELATED-PROCEEDINGS APPENDIX**

None